

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2006/000125**A. CLASSIFICATION OF SUBJECT MATTER***G06Q 40/00(2006.01);*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G06Q 40/00 /

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and application for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS "RECEIPT, 2D CODE, ATM"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 2002-94437 A (SUNWOO INFORMATION SYSTEM CO., LTD.) 18 DECEMBER 2002 SEE THE WHOLE DOCUMENT	1, 2, 6, 11, 12, 15, 16, 20
Y		3-5, 7-10, 13, 14, 17-19, 21-24
Y	KR 2001-56244 A (KOREA TELECOM) 4 JULY 2001 SEE THE WHOLE DOCUMENT	1-24
Y	KR 2004-102458 A (ECOMM & SYSTEM CO., LTD.) 8 DECEMBER 2004 SEE THE WHOLE DOCUMENT	1-24
A	KR 2001-108717 A (SHINWON INFORMATION TECHNOLOGY CO., LTD.) 8 DECEMBER 2001 SEE THE WHOLE DOCUMENT	1-24
A	KR 2002-34288 A (NURI TELECOM CO., LTD.) 9 MAY 2002 SEE THE WHOLE DOCUMENT	1-24

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

25 APRIL 2006 (25.04.2006)

Date of mailing of the international search report

**25 APRIL 2006 (25.04.2006)**

Name and mailing address of the ISA/KR

Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Jung Suk

Telephone No. 82-42-481-5789



# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference NP050623PCT	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/KR2006/000125	International filing date ( <i>day/month/year</i> ) 12 January 2006 (12.01.2006)	Priority date ( <i>day/month/year</i> ) 06 July 2005 (06.07.2005)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant DUZON DASS CO., LTD		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
  2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 09 January 2008 (09.01.2008)
Facsimile No. +41 22 338 82 70	Authorized officer  <b>Philippe Becamel</b>  e-mail: pt12.pct@wipo.int

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

LEE, Chae-hyung

5-623, Hyochang-dong Yongsan-gu Seoul 140-896 Republic  
of Korea

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **25 APRIL 2006 (25.04.2006)**

Applicant's or agent's file reference  
NP050623PCT

## FOR FURTHER ACTION

See paragraph 2 below

International application No.

**PCT/KR2006/000125**

International filing date (day/month/year)

**12 JANUARY 2006 (12.01.2006)**

Priority date(day/month/year)

06 JULY 2005 (06.07.2005)

International Patent Classification (IPC) or both national classification and IPC

*G06Q 40/00(2006.01)i*

Applicant

**DUZON DASS CO., LTD et al**

## 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

## 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon  
302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Date of completion of this opinion

25 APRIL 2006 (25.04.2006)

Authorized officer

LEE, Jung Suk

Telephone No. 82-42-481-5785



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2006/000125

**Box No. I Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ on paper  
☐ in electronic form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2006/000125

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	3-5, 7-10, 13, 14, 17-19, 21-24	YES
	Claims	1, 2, 6, 11, 12, 15, 16, 20	NO
Inventive step (IS)	Claims		YES
	Claims	1-24	NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims		NO

**2. Citations and explanations :**

The following documents have been considered for the purpose of this written opinion:

D1: KR 2002-94437 A

D2: KR 2001-56244 A

D3: KR 2004-102458 A

D1 relates to a system and method for managing a written notice using a two-dimensional bar code to perform a receipt business rapidly through reading a two-dimensional bar code.

D2 relates to a system and method for issuing/paying an electronic notice using a relay server to reduce a time and a cost through a communication network.

D3 relates to an automatic terminal and a method to make a public fee transaction more convenient by using a 2 dimensional bar code.

Novelty:

Claims 1, 2, 11, 15, and 16 of the present invention are independent claims and relate to a system and a method of bill payment using two- dimensional (2D) code.

The system is comprised of a receipt management database, a financial institution sever, a relay sever, and a payee sever including an bill information extracting, a code converting into 2D code, a bill transmitting and a controller.

Claims 6, 12, and 20 of the present invention are dependent claims and describe providing payer information from the financial institution sever to the controller after bill payment.

D1 is comprised of a communication terminal, a notice notifying device, a notice transmission device, a notice receipting device and a notice management sever.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2006/000125

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.  
Continuation of :

BOX V.

The communication terminal receives an issued notice, the notice notifying device notifies a message with respect to a notice issuing state to applicants, the notice transmission device converts a inputted essential data into a two-dimensional bar code format, and the notice receipting device transmits payment results to the notice transmitting device and the notice management sever.

D1 is same to that of the present invention in problem to be solved. Therefore, novelty of the claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention can not be acknowledged.

**Inventive Step:**

Since claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention is not considered to involve novelty, the claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention lacks an inventive step.

The rest of the claims of the present invention describe that a relay sever, a management sever, and ATM are added to the system.

The relay sever and the management sever are reprocessing bill/payer information, the system make a notice of arrears and has ATM to pay bill using 2D code.

D1 is similar to that of the present invention in technical feature for issuing notice, paying notice, and making a notice of arrears.

D2 describes that an electronic notice certification system issues and manages an electronic certification document, and a electronic notice paying relay server connects to a bank host or a credit card company host.

D3 teaches that an automatic terminal capable of public fee transaction using bar codes includes a card reader identifying various cards, a bar code scanner reading bar codes having information on public fees, a display, an issuing device, a central controller, an input portion, and a communication portion.

Thus, a skilled person can easily invent the system and the method of claims 3-5, 7-10, 13, 14, 17-19, and 21-24 from combination of mentioned D1, D2 & D3.

Therefore, The inventive step of the claims 1-24 of the present invention is not acknowledged.

**Industrial Applicability:**

All claims are considered to be industrially applicable.

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

LEE, Chae-hyung

5-623, Hyochang-dong Yongsan-gu Seoul 140-896 Republic  
of Korea

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) **25 APRIL 2006 (25.04.2006)**

Applicant's or agent's file reference  
NP050623PCT

## FOR FURTHER ACTION

See paragraph 2 below

International application No.

**PCT/KR2006/000125**

International filing date (day/month/year)

**12 JANUARY 2006 (12.01.2006)**

Priority date(day/month/year)

06 JULY 2005 (06.07.2005)

International Patent Classification (IPC) or both national classification and IPC

**G06Q 40/00(2006.01)i**

Applicant

**DUZON DASS CO., LTD et al**

## 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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For further options, see Form PCT/ISA/220.

## 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
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302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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Authorized officer

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Telephone No. 82-42-481-5785



**WRITTEN OPINION OF THE  
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International application No.

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☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ on paper  
☐ in electronic form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2006/000125

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	3-5, 7-10, 13, 14, 17-19, 21-24	YES
	Claims	1, 2, 6, 11, 12, 15, 16, 20	NO
Inventive step (IS)	Claims		YES
	Claims	1-24	NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims		NO

**2. Citations and explanations :**

The following documents have been considered for the purpose of this written opinion:

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D3: KR 2004-102458 A

D1 relates to a system and method for managing a written notice using a two-dimensional bar code to perform a receipt business rapidly through reading a two-dimensional bar code.

D2 relates to a system and method for issuing/paying an electronic notice using a relay server to reduce a time and a cost through a communication network.

D3 relates to an automatic terminal and a method to make a public fee transaction more convenient by using a 2 dimensional bar code.

Novelty:

Claims 1, 2, 11, 15, and 16 of the present invention are independent claims and relate to a system and a method of bill payment using two-dimensional (2D) code.

The system is comprised of a receipt management database, a financial institution sever, a relay sever, and a payee sever including an bill information extracting, a code converting into 2D code, a bill transmitting and a controller.

Claims 6, 12, and 20 of the present invention are dependent claims and describe providing payer information from the financial institution sever to the controller after bill payment.

D1 is comprised of a communication terminal, a notice notifying device, a notice transmission device, a notice receiving device and a notice management sever.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2006/000125

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

BOX V.

The communication terminal receives an issued notice, the notice notifying device notifies a message with respect to a notice issuing state to applicants, the notice transmission device converts a inputted essential data into a two-dimensional bar code format, and the notice receiving device transmits payment results to the notice transmitting device and the notice management sever.

D1 is same to that of the present invention in problem to be solved. Therefore, novelty of the claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention can not be acknowledged.

**Inventive Step:**

Since claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention is not considered to involve novelty, the claims 1, 2, 6, 11, 12, 15, 16, and 20 of the present invention lacks an inventive step.

The rest of the claims of the present invention describe that a relay sever, a management sever, and ATM are added to the system.

The relay sever and the management sever are reprocessing bill/payer information, the system make a notice of arrears and has ATM to pay bill using 2D code.

D1 is similar to that of the present invention in technical feature for issuing notice, paying notice, and making a notice of arrears.

D2 describes that an electronic notice certification system issues and manages an electronic certification document, and a electronic notice paying relay server connects to a bank host or a credit card company host.

D3 teaches that an automatic terminal capable of public fee transaction using bar codes includes a card reader identifying various cards, a bar code scanner reading bar codes having information on public fees, a display, an issuing device, a central controller, an input portion, and a communication portion.

Thus, a skilled person can easily invent the system and the method of claims 3-5, 7-10, 13, 14, 17-19, and 21-24 from combination of mentioned D1, D2 & D3.

Therefore, The inventive step of the claims 1-24 of the present invention is not acknowledged.

**Industrial Applicability:**

All claims are considered to be industrially applicable.

From the INTERNATIONAL BUREAU

**PCT**NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

To:

LEE, Chae-hyung  
5-623, Hyochang-dong  
Yongsan-gu  
Seoul 140-896  
RÉPUBLIQUE DE CORÉE

(PCT Administrative Instructions, Section 411)

Date of mailing (day/month/year) 17 March 2006 (17.03.2006)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference NP050623PCT	
International application No. PCT/KR2006/000125	International filing date (day/month/year) 12 January 2006 (12.01.2006)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 06 July 2005 (06.07.2005)
Applicant DUZON DASS CO., LTD et al	

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable)* The letters "NR" appearing in the right-hand column denote a **priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau** under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, **the attention of the applicant is directed to Rule 17.1(c)** which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- (If applicable)* An asterisk (\*) appearing next to a date of receipt, in the right-hand column, denotes a **priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b)** (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
06 July 2005 (06.07.2005)	10-2005-0060931	KR	07 February 2006 (07.02.2006)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Carlos Roy - Gijsbertus Beijer

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Facsimile No. +41 22 338 82 70

Form PCT/IB/304 (October 2005)

CSAFMOXM